

ABSTRACT OF THE DISCLOSURE

Method and system for providing data transmission with transparency over the Gigabit Ethernet data stream includes receiving the 10 bit code with a data rate of 1,250 Mbits/second from the encoded 8B/10B data and arbitrarily selecting 9 bit codes using a look-up translation table which can fully represent the 10 bit codes received. The translated 9 bit codes with a data rate of 1,125 Mbits/second is then provided to eight STS-3 inverse multiplexer which inverse multiplexes the received codes into eight STS-3 data streams each with a data rate of 155.52 Mbits/second plus an offset Δ which are then provided to the modem for transmission to the far end via the optical transmission path.

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